

What is claimed is:

1. A paper discharge unit comprising:

a chute box having a plurality of slots for inserting papers of different sizes thereinto, provided at different heights in a first surface thereof;

a plurality of guide members, inclined downwardly from the plurality of slots, provided to form a gap through which the papers fall toward a second surface of the chute box facing the first surface in which the plurality of slots are formed;

wherein

the chute box is provided with side walls for regulating widthwise movement on the guide member of a first paper, having the largest width among the papers; and

each of the guide members is provided with a guide rib for regulating widthwise movement of a second paper, which is smaller than the first paper, in cooperation with one of the side walls, the guide ribs extending from the slot to the second surface of the chute box.

2. A paper discharge unit as defined in Claim 1, wherein:

the guide ribs are provided so that the width between them and the one of the side walls becomes narrower toward the second surface of the chute box.

3. A paper discharge unit as defined in claim 1, wherein:

The guide ribs are provided so that upper edges thereof approach the second surface of the chute box toward the end of the guide ribs away from the slots.

4. A paper discharge unit as defined in claim 1, further comprising:

downwardly extending sheet members provided at the distal ends of the guide members, the sheet members being in contact
5 with the second surface of the chute box.

5. A paper discharge unit as defined in claim 4, wherein:
the first and second papers are curled in the cross section of their width directions; and

the sheet member is provided with a first space for both
10 edges in the width direction of the first paper to be inserted in, and a second space for both edges in the width direction of the second paper to be inserted in.

6. A paper discharge unit as defined in claim 1, further comprising:

15 a paper housing portion for stacking and housing the papers, provided below the chute box; and

a position controlling member for causing the papers which fall through the chute box to be stacked in the same direction, provided between the chute box and the paper housing
20 portion.

7. A printing apparatus comprising:

a plurality of printing engines capable of discharging papers of different sizes on which images are printed, the printing engines being housed in the printing apparatus in a
25 stacked manner;

a chute box having a plurality of slots for inserting

papers of different sizes discharged by the printing engines
thereinto, provided corresponding to each of the printing
engines in a first surface thereof;

5 a plurality of guide members, inclined downwardly from
the plurality of slots, provided to form a gap through which
the papers fall toward a second surface of the chute box facing
the first surface in which the plurality of slots are formed;
wherein

10 the chute box is provided with side walls for regulating
widthwise movement on the guide member of a first paper, having
the largest width among the papers; and

each of the guide members is provided with a guide rib
for regulating widthwise movement of a second paper, which is
smaller than the first paper, in cooperation with one of the
15 side walls, the guide ribs extending from the slot to the second
surface of the chute box.